Dynamic neural representations in motor learning: Technical and empirical contributions

Stellingen behorende bij het proefschrift

Dynamic neural representations in motor learning: Technical and empirical contributions

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1. It is feasible and informative to simultaneously record detailed movement-related behavioral data and functional MR images to better describe brain-behavior relationships. *(this thesis)*

2. Continuous motor sequence learning is mainly characterized by changes in neural efficiency, not organization. (*this thesis*)

3. Embodied simulations during action observation engage widespread activations in cortical motor regions beyond the classically defined mirror-neuron system. (*this thesis*)

4. Experience-dependent modulations in brain activation during action observation can be identified based on nonvisual motor learning. (*this thesis*)

5. Ideas not coupled with action never become bigger than the brain cells they occupied. (*Arnold H. Glasgow, no further bibliographic information available*)

6. During the chess game in which IBM's Big Blue beat Kasparov, a human operator had to move Big Blue's chess pieces. This nicely illustrated the need for further research on motor control processes. (*mentioned in Rosenbaum's 'The Cinderella of Psychology: The neglect of motor control in the science of mental life and behavior' (2005)*)

7. In science one tries to tell people, in such a way as to be understood by everyone, something that no one ever knew before. Unfortunately, sometimes the result is the exact opposite. (*based on a quote by P.A.M. Dirac, 1977*)

8. Because journal articles which have been published more than 15 years ago are generally not available online, the probability that such papers will get cited is negatively correlated with the distance between a given researcher's office and the university library.

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